

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number
WO 2004/082811 A1

(51) International Patent Classification⁷: **B01D 53/34**,
53/92, F01N 3/26, F23G 7/06

(21) International Application Number:
PCT/EP2003/051113

(22) International Filing Date:
30 December 2003 (30.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
MI2003A000571 21 March 2003 (21.03.2003) IT
MI2003A002179 12 November 2003 (12.11.2003) IT
MI2003A002180 12 November 2003 (12.11.2003) IT

(71) Applicant (for all designated States except US):
KLEEN-UP S.R.L. [IT/IT]; Corso Lodi, 24, I-20135
MILANO (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MUSA, Lorenzo**
[IT/IT]; c/o Kleen-Up S.r.l., Corso Lodi, 24, I-20135
MILANO (IT). **SPADARO NORELLA, Mauro** [IT/IT];
c/o Kleen-Up S.r.l., Corso Lodi, 24, I-20135 MILANO
(IT). **FIOCCO, Luigino** [IT/IT]; c/o Kleen-Up S.r.l.,
Corso Lodi, 24, I-20135 MILANO (IT).

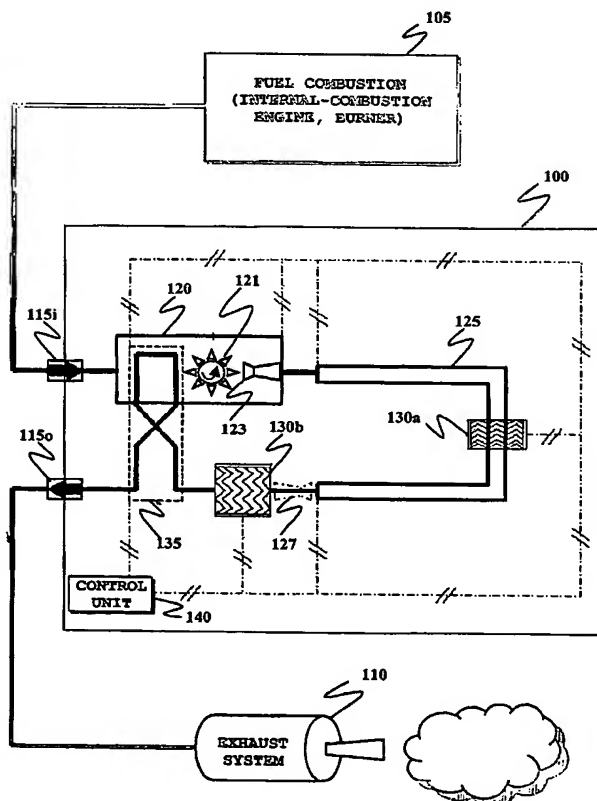
(74) Agents: **MACCALLI, Marco** et al.; **MACCALLI & PEZ-**
ZOLI S.r.l., Via Settembrini, 40, I-20124 MILANO (IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR REDUCING COMBUSTION RESIDUES IN EXHAUST GASES



(57) Abstract: A method and an apparatus for reducing combustion residues, particularly pollutants, in exhaust gases generated from the combustion of fuels such as fossil fuels, wood and the like. The exhaust gases are treated before releasing them in the environment. Said treating of the exhaust gases comprises performing a post-combustion process by submitting the exhaust gases to radiant heat so as to increase a temperature of the exhaust gases to a value sufficient to cause self-combustion.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*